

Amendment to the Claims:

This listing of claims will replace all prior versions, and listing of claims in the application.

Listing of Claims:

1. (Currently Amended) An illumination system for forming a low beam in traffic applications comprising a light source and a reflecting surface formed by a multiplicity of reflector segments arranged around a central optical axis, wherein the light source is positioned in a focal point of the reflecting surface, the light source having a major axis parallel to the central optical axis, the light source in operation emitting~~emits~~ light over an angle of at most 180°~~unrestricted by a boundary surface~~, in a direction facing away from the intersection of the central optical axis and the reflecting surface and toward the emission window, and in that each of the reflector segments is parabolically-shaped and has a segment optical axis parallel to the central optical axis, ~~while~~ wherein each reflector segment is positioned such that the segment optical axis substantially intersects with an edge of the light source, such that the reflector segment optical axis aligns with the central optical axis of the reflecting surface forming a sharp cutoff between an illuminated area and a glare area of the light beam without the aid of occulting elements.

2. (Previously Presented) An illumination system as claimed in claim 1, wherein the light source is positioned substantially below a horizontal plane including the central optical

axis.

3. (Previously Presented) An illumination system as claimed in claim 1, wherein one edge of the light source coincides substantially with the central optical axis.

4. (Previously Presented) An illumination system as claimed in claim 1, wherein opposite reflector segments are positioned such that the optical axes of the reflector segments coincide with each other.

5. (Previously Presented) An illumination system as claimed in claim 1, wherein the number of reflector segments is divisible by four.

6. (Previously Presented) An illumination system as claimed in claim 5, wherein the number of reflector segments is four, eight or twelve.

7. (Previously Presented) An illumination system as claimed in claim 1, wherein the reflector segments reflect light according to total internal reflection.

8. (Previously Presented) An illumination system as claimed in claim 1, wherein the light source is a light-emitting diode.

9. (Previously Presented) An illumination system as claimed in claim 1, wherein the light-emitting diode in operation substantially emits white light.

10. (Previously Presented) An illumination system as claimed in claim 1, wherein the light source is an exit window of an optical fiber or a bundle of optical fibers.

11. (Previously Presented) An illumination system as claimed in claim 1, wherein the fiber or fibers are powered by a light engine.

12. (Previously Presented) A road illumination system positioned beside a traffic route comprising an illumination system as claimed in claim 1.

13. (Previously Presented) A road illumination system as claimed in claim 12, wherein the road illumination system is provided on poles or on a crash barrier at the side of the traffic route.

14. (Currently Amended) A vehicle headlamp comprising an illumination system ~~as claimed in claim 1~~ wherein the illumination system has a light source and a reflecting surface formed by a multiplicity of reflector segments arranged around a central optical axis, wherein the light source is positioned in a focal point of the reflecting surface, the light source having a major axis parallel to the central optical axis, the light source in operation emitting light over an angle of at most 180° in a direction facing away from the

intersection of the central optical axis and the reflecting surface and toward the emission window, and in that each of the reflector segments is parabolically-shaped and has a segment optical axis parallel to the central optical axis, while wherein each reflector segment is positioned such that the segment optical axis substantially intersects with an edge of the light source, such that the reflector segment optical axis coincides aligns with the central optical axis of the reflecting surface forming a sharp cutoff between an illuminated area and a glare area of the light beam without the aid of occulting elements.